



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/585,782

07/11/2006

Andrew Donald Thomas

4601-0114PUS1

1385

2292 7590 03/21/2008
BIRCH STEWART KOLASCH & BIRCH
PO BOX 747
FALLS CHURCH, VA 22040-0747

EXAMINER

ALI, HYDER

ART UNIT

PAPER NUMBER

3747

NOTIFICATION DATE

DELIVERY MODE

03/21/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary	Application No. 10/585,782	Applicant(s) THOMAS, ANDREW DONALD	
	Examiner HYDER ALI	Art Unit 3747	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-7 is/are allowed.
- 6) ☒ Claim(s) 8 and 18 is/are rejected.
- 7) ☒ Claim(s) 9-17 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 July 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>7/11/06</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Priority

Acknowledgment is made of applicant's claim for foreign priority based on an application filed in AUSTRALIA on 1/28/2004. It is noted, however, that applicant has not filed a certified copy of the 2004900377 application as required by 35 U.S.C. 119(b).

Specification

The abstract of the disclosure does not commence on a separate sheet in accordance with 37 CFR 1.52(b)(4). A new abstract of the disclosure is required and must be presented on a separate sheet, apart from any other text.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 8 and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Eluchans (US 5,524,579) or MacMillan (US 5,315,969) or Wallis (US 6,763,788) or Wallis (5,526,780).

As to Claim 8, Eluchans discloses

A rotary valve assembly for an internal combustion engine comprising a cylinder head 24 and an axial flow rotary valve 10 rotatable about an axis within a bore 22 in said cylinder head, said valve having a port 18 extending from a peripheral opening on the periphery of said valve to an axial opening at one end of said valve, said peripheral opening periodically communicating with a combustion chamber 32 through a window in said bore 22 as said valve rotates, characterized in that every axial portion of said peripheral opening, said window or both that is longer than

Art Unit: 3747

one half of the length of said window is asymmetric about a plane passing through the axial mid-point of said portion, perpendicular to said axis. **See col. 3, lines 55.**

As to Claim 18, Eluchans discloses wherein said port 18 is an inlet port.

As to Claim 8, MacMillan discloses

A rotary valve assembly for an internal combustion engine comprising a cylinder head and an axial flow rotary valve 10 rotatable about an axis within a bore in said cylinder head, said valve having a port 18 extending from a peripheral opening on the periphery of said valve 10 to an axial opening at one end of said valve, said peripheral opening periodically communicating with a combustion chamber 46 through a window in said bore as said valve rotates, characterized in that every axial portion of said peripheral opening, said window or both that is longer than one half of the length of said window is asymmetric about a plane passing through the axial mid-point of said portion, perpendicular to said axis. See col. 2, lines 35-65.

As to Claim 18, MacMillan discloses wherein said port 18 is an inlet port.

As to Claim 8, Wallis (6,763,788) discloses

A rotary valve assembly for an internal combustion engine comprising a cylinder head 7 and an axial flow rotary valve 1 rotatable about an axis within a bore in said cylinder head, said valve having a port 2 extending from a peripheral opening on the periphery of said valve to an axial opening at one end of said valve, said peripheral opening periodically communicating with a combustion chamber 8 through a window 6 in said bore as said valve rotates, characterized in that every axial portion of said peripheral opening, said window or both that is longer than one half of the length of said window is asymmetric about a plane passing through the axial mid-point of said portion, perpendicular to said axis. See col. 15, lines 18-30

As to Claim 18, Wallis (6,763,788) discloses wherein said port 2 is an inlet port.

As to Claim 8, Wallis (5,526,780) discloses

A rotary valve assembly for an internal combustion engine comprising a cylinder head 16 and an axial flow rotary valve 10 rotatable about an axis within a bore in said cylinder head, said valve having a port 11 extending from a peripheral opening on the periphery of said valve to an axial opening at one end of said valve, said peripheral opening periodically communicating with a combustion chamber 17

Art Unit: 3747

through a window 15 in said bore as said valve rotates, characterized in that every axial portion of said peripheral opening, said window or both that is longer than one half of the length of said window is asymmetric about a plane passing through the axial mid-point of said portion, perpendicular to said axis. See col. 4, lines 25-35.

As to Claim 18, Wallis (5,526,780) discloses wherein said port 11 is an inlet port.

Allowable Subject Matter

Claims 1-7 are allowed.

Claims 9-17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Wallis (US 6,994,067), Massmann et al (US 6,694,942), Wallis et al (US 5,509,386), Buelna (US 5,052,349), Cross (US 1,887,997), Smith et al (US 5,941,206).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HYDER ALI whose telephone number is (571)272-4836. The examiner can normally be reached on M-F (8:30-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Kirk Cronin can be reached on (571) 272-4536. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3747

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/HYDER ALI/
Examiner, Art Unit 3747

/Stephen K. Cronin/
Supervisory Patent Examiner, Art Unit 3747